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190-00356-35 Rev B

GNS 400W/500W Series SW Version 4.00 Upgrade Supplement

This supplement provides information regarding new features of software version 4.00 for 400W/500W Series units.

The Pilot's Guide and Garmin Displays Addendum have been revised for SW Version 4.00.

- GNS 400W/500W Series Pilot's Guide & Reference, (Garmin P/N 190-00356-00 or 190-00357-00, respectively) Rev G or later
- GNS 400W/500W Series Quick References, (Garmin P/N 190-00356-01 or 190-00357-01, respectively) Rev G or later
- GNS 400W/500W Series Garmin Optional Displays Addendum (Garmin P/N 190-00356-30) Rev G or later
- GNS 400W/500W Series Display Interfaces Addendum, (Garmin P/N 190-00356-31) Rev D or later

***NOTE**: The combination of the following documents is equivalent to the Pilot's Guide revisions listed above:*

- GNS 400W/500W Series SW Version 4.00 Upgrade Supplement (Garmin P/N 190-0356-35)
- GNS 400W/500W Series SW Version 3.30 Upgrade Supplement (Garmin P/N 190-0356-34)
- GNS 400W/500W Series SW Version 3.20 Upgrade Supplement (Garmin P/N 190-0356-33)
- GNS 400W/500W Series SW Version 3.00 Upgrade Supplement (Garmin P/N 190-0356-32)
- GNS 400W/500W Series Pilot's Guide & Reference (any Revision)
- GNS 400W/500W Series Garmin Optional Displays Addendum (any Revision)
- GNS 400W/500W Series Display Interfaces Addendum (any Revision)

Current documents are available at www.garmin.com for free download.
Printed copies may be purchased by contacting Garmin Customer Support.

400W & 500W Series Pilot's Guides & Quick References

New Airframe Configuration

SW Version 4.00 software adds the helicopter airframe type.

New Aviation Database Type

The database is designed for helicopters using HTAWS, but may also be used with fixed-wing aircraft. TAWS warnings are reduced near heliports. This database will only work with SW Version 4.00, or greater, and is available in NavData cards p/n 010-00875-( ).

Some of the airport waypoint pages may display additional information for heliports.

New Terrain Database

The new terrain database contains higher resolution terrain information (6 arc-second vs. 30 arc-second) that may be used by both fixed-wing aircraft and helicopters. This database is required for HTAWS systems and is optional for all others. This database will only work with SW Version 4.00, or greater, and is available in Terrain/Obstacle cards p/n 010-00874-( ).

New Obstacle Database Type

The new terrain database contains additional obstacles, and while designed for helicopter installations, may also be used with fixed-wing aircraft, and is available in Terrain/Obstacle cards p/n 010-00874-( ). Obstacles less than 200 feet AGL will be shown, where the previous database only displayed obstacles above 200 feet AGL. The previous database type is still available for fixed-wing aircraft.

New Audio Database

The new audio database includes messages for HTAWS. It is required for HTAWS and will be a standard part of the installation of SW Version 4.00. The audio database version will be shown on the software version page of all units.

Helicopter Terrain Configuration

In the helicopter airframe configuration, terrain selections include HTAWS and Terrain Proximity. All 400W and 500W-series units may be upgraded to HTAWS. The Terrain page legend with HTAWS and Terrain Proximity is different from the Terrain legend displayed when configured as a fixed-wing aircraft.

Helicopter Configuration With Air/Ground Switch

In Helicopter configuration, the Air/Ground switch option has an effect on annunciation of traffic and the ground speed at which navigation assumes the aircraft is on the ground.

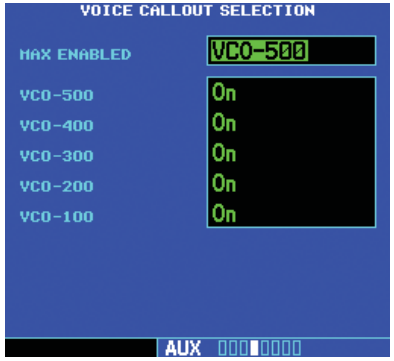
Warnings and Messages

A warning concerning Non-WGS84 waypoints has been added to the Warnings section of the 400W and 500W series Pilot's Guides. Messages concerning Non-WGS84 waypoints have been edited for clarity.

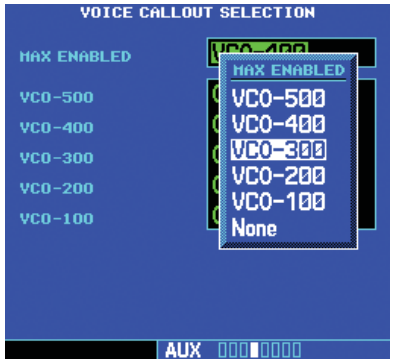
400W/500W Series Garmin Optional Displays Addendum

Software version 4.00, or later, supports the HTAWS (as an optional upgrade) and Terrain Proximity (standard) terrain configurations for helicopters in both the 400W and 500W series units. Full details are available in the GNS 400W/500W Series Garmin Optional Displays Addendum (Garmin P/N 190-00356-30 Rev G).

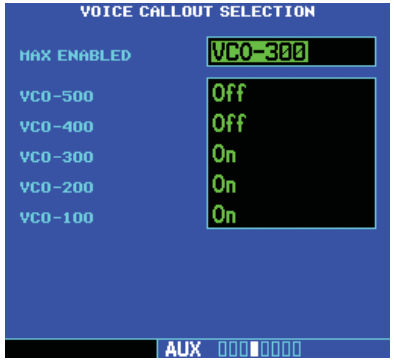
The Garmin GTS 8XX series products are now available as optional Traffic Advisory System units. Details are available in the GNS 400W/500W Series Garmin Optional Displays Addendum (Garmin P/N 190-00356-30 Rev G) and the GTS 8XX Series Pilot's Guide - Traffic Advisory System (Garmin P/N190-00587-02).



3. Turn the **small right** knob to highlight the desired VCO value.



4. Press **ENT**. The values at and below the selected value will be enabled. The values above the selected value will be disabled.



LNAV+V Description

The description of LNAV+V has been changed to read, "GPS approach using published LNAV minima. Advisory vertical guidance is provided."

Obstacle Display On Nav Map Page 2

A Page Menu selection allows the pilot to control the display of obstacles on Nav Map page 2.

Aux Mode - Flight Timers

In helicopter mode, the timer criteria has been changed to select between Power-On and In Air.

To record or reset the departure time:

1. Select "Flight Timers" from the Utility Page.
2. Turn the **large right** knob to highlight the reset mode field, under "Departure Time". The reset mode field indicates "Pwr-on" or "GS>30kt".
3. Turn the **small right** knob to select the desired reset mode. ("Pwr-on" records a departure time when the 500W-series unit is turned on. "GS>30kt" records a departure time once the GPS-computed ground speed exceeds 30 knots.)

The 500W-series unit can be configured to record the departure time when the unit is powered on or when your ground speed exceeds 30 knots.

In the case of a helicopter installation, the Departure Criteria is "Power-on" or "In-air."

4. Press **ENT** when finished.
5. To reset the departure time, turn the **large right** knob to highlight "Reset?" and press **ENT**. This will reset the departure time to the current time.

To view, use or reset total trip time:

1. Select "Flight Timers" from the Utility Page.
2. Turn the **large right** knob to highlight the reset mode field, under "Total Trip Time". (The reset mode field indicates "Pwr-on" or "GS>30kt".)
3. Turn the **small right** knob to select the desired reset mode. ("Pwr-on" resets trip time to zero hours/minutes/seconds each time the 500W-series unit is turned on. "GS>30kt" resets trip time to zero after power on and when the GPS-computed ground speed exceeds 30 knots.)

Turn the small right knob to select when the trip timer resets: each time the 500W-series unit is powered on or when ground speed exceeds 30 knots.

In the case of a helicopter installation, the Total Trip Criteria options are: "Power-on" or "In-air."

4. Press **ENT** when finished.
5. To reset the total trip time, turn the **large right** knob to highlight "Reset?" and press **ENT**.

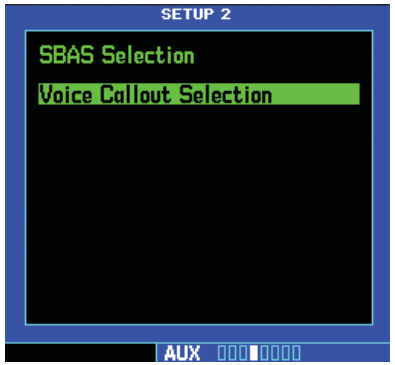
Aux Mode - Voice Callout

In Aux Mode Setup Page 2, the Voice Callout Selection feature is available for helicopter mode.

The Voice Callout (VCO) selection is available in 400W/500Wseries units in which HTAWS is installed. The VCO functionality provides a voice annunciation of the aircraft's height above terrain or the nearest airport, heliport, runway, or helipad when that threshold is first crossed. The available callouts include "Five Hundred" through "One Hundred" in hundred-foot intervals. The voice callouts can be enabled and disabled through the Voice Callout Selection option on the AUX - SETUP 2 page.

To select the Voice Callout choices, in the Setup 2 page select the Voice Callout Selection item and then select the desired options.

1. Select "Voice Callout Selection" from the Setup 2 Page and press **ENT**.



2. The flashing cursor highlights the VCO selection.